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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,712	01/29/2002	Bartley K. Andre	APL1P234C1/P2426USC1	8995

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EXAMINER

LESPERANCE, JEAN E

ART UNIT PAPER NUMBER

2674

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/060,712

Applicant(s)

ANDRE ET AL.

Examiner

Jean E Lesperance

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on October 27, 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-22, 25-28, 30-34, 36, 37, 39 and 42-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-22, 25-28, 30-34, 36, 37, 39 and 42-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/27/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The amendment filed October 27, 2005 is entered and claims 20-22, 25-28, 30-34, 36, 37, 39 and 42-47 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 20-22, 25-28, 30-34, 36, 37, 39 and 42-47 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-22, 25-28, 30, 31, 39, and 43-45 are rejected under 35 USC 103 (a) as being unpatentable over US Patent # 5,841,426 ("Dodson et al.") in view of US Patent # 5,633,658 ("Ma").

As per claim 20, Dodson et al. teach an input device (10) comprising a base member Fig.1 (12); and

an integral top member (platform Fig.1 (18) with the base member (base Fig.1 (12) to form the input device, the integral top member moving relative to the base

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member to provide a user input action (execution switches 32 and 38 have operators integral with platform 18. A switch operator is a movable part of the switch which is contacted by the user of the device. When platform 18 is inclined forwardly or backwardly, it will contact a plunger of a switch 32 or 38. Platform 18 itself, then, serves as the switch operator (column 4, lines 21-27)), the integral top member being capable of moving between a first position, placing the integral top member away from the base member and a second position, placing the integral top member towards the base member (It is desired to have an inclined switch operator, that being an operator which must be moved by variably inclining the operator. This arrangement affords easy operation of the switch by foot and also allows the switch operator to be flush with the upper surface 26 of platform 18 when not being operated. Also, the heel and toe of the user's foot need not be lifted above surface 26 in order to reach the top of a linear action operator (not shown), such as a button which projects upwardly from surface 26 (column 4, lines 28-36)). The prior art teaches all the claimed limitations with the exception of provided the base member and integral top member working together to encase internal components of the input device as a housing.

However, Ma teaches the top cover shell 1 has a smoothly curved profile fitting the palm of the hand, having a plurality of pivoted press keys 11 at the front side adapted for triggering a respective contact on the circuit board 2, a coupling device 12 at the bottom adapted for fastening to the intermediate shell 3 (as one embodiment of the present invention, the coupling device 12 is comprised of a plurality of downward locating posts), a downward rod 13 which has a center axle hole 14, and at least one for

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example two downward locating posts 15 raised from the bottom at two opposite sides relative to the downward rod 13 and adapted for securing the circuit board 2 (column 1, lines 60-67 and column 2, lines 1-4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the top and bottom shells as taught by Ma in the foot operated computer mouse disclosed by Dobson et al. because this would provide a mouse comprises a top cover which has press keys for signal input into the computer.

As per claim 21, Dodson et al. teach a signal generator Fig.1 (14) corresponding to the internal components include electronics associated with moving a cursor on a display.

As per claim 22, Dodson et al. teach a base Fig.1 (12) corresponding to wherein the base member is configured to make moving contact with a surface.

As per claim 25, Dodson et al. teach a platform Fig.1 (18) uses to place the operator foot and the platform 18 will make contact with switches 32 and 38 corresponding to wherein the clicking action is implemented by moving the integral top member to the second position.

As per claim 26, Dodson et al. teach a biasing a ball and socket joint may be provided with a spring for urging base 18 into a predetermined position relative to the base 12 (column 3, lines 50-52) corresponding to a spring pad for biasing the integral top member in the first position.

As per claim 27, Dodson et al. teach a top surface 26 which inclined when base 12 is supported on a horizontal surface corresponding wherein the integral top member

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is pivotally coupled to the base member and wherein the integral top member includes a pair of pivots Fig.1 (32 and 38), and wherein the base member includes a pair of snap mechanisms that mate with the pair of pivots.

As per claim 28, Dodson et al. teach a top surface 26 which inclined when base 12 is supported on a horizontal surface corresponding wherein the integral top member is pivotally coupled to the base member and wherein the integral top member includes a pair of pivots Fig.1 (32 and 38), and wherein the base member includes a pair of snap mechanisms that mate with the pair of pivots.

As per claim 30, Dodson et al. teach switches Fig.1 (32 and 38) corresponding to wherein an electronic switch is coupled to the base member, and wherein the integral top member includes an elongated member for engaging the electronic switch.

As per claim 31, Dodson et al. teach a top member Fig.1 (26) corresponding to wherein the integral top member has no separate mechanical buttons disposed thereon.

As per claim 39, Dodson et al. teach a top surface Fig.1 (26) corresponding to wherein the integral top member forms the entire top portion of the housing.

As for claim 43, Dodson et al. teach a platform located on said top side of said base, said platform adapted to cooperate with and support a user's foot, said platform engaged with a pivot means for pivotal movement with respect to said base (column 5, lines 31-35).

As for claim 44, Dodson et al. teach a foot-operated mouse for controlling a computer, providing similar functions as a conventional hand operated mouse.

As for claim 45, Dodson et al. teach a foot-operated mouse for controlling a computer, providing similar functions as a conventional hand operated mouse.

4. Claims 32-34, 36, 37 and 42 are rejected under 35 USC 103 (a) as being unpatentable over US Patent # 5,633,658 ("Ma") in view of US Patent # 5,841,426 ("Dodson et al.").

As per claim 32, Da teaches a handheld computer mouse having a mouse housing for containing mouse electronic (a mouse including a top member which has press keys for signal input into the computer, coupling device at the bottom (abstract)), the handheld computer mouse comprising:

a bottom member configured to make moving contact with a surface (bottom member Fig.2 (3);

a top member mechanically coupled with the base member to form the mouse housing and to encase said mouse electronics, the mouse housing being configured to be grasped and manipulated by a hand of a user (the top cover shell 1 has a smoothly curved profile fitting the palm of the hand, having a plurality of pivoted press keys 11 at the front side adapted for triggering a respective contact on the circuit board 2, a coupling device 12 at the bottom adapted for fastening to the intermediate shell 3 (as one embodiment of the present invention, the coupling device 12 is comprised of a plurality of downward locating posts), a downward rod 13 which has a center axle hole 14, and at least one for example two downward locating posts 15 raised from the

bottom at two opposite sides relative to the downward rod 13 and adapted for securing the circuit board 2 (column 1, lines 60-67 and column 2, lines 1-4),

an electronic switch fully contained inside the mouse housing such that the electronic switch is protected and hidden from view, the electronic switch being activated by said clicking action so as to perform an onscreen action (the circuit board 2 is adapted for connecting to a computer system by a cable thereof for controlling the movement of the cursor by means of the operation of an operation circuit thereof (because the operation circuit is of the prior art, it is not described in detail), having a plurality of switches 21 corresponding to the press keys 11 of the top cover shell 1 (column 2, lines 5-11)). The prior art does teach all the claimed limitations with the exception of providing the top member defining the entire top surface of the mouse housing.

However, Dodson et al. teach a platform Fig.1 (18) being an integral top member as the entire top surface.

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the platform as a top member as taught by Dodson et al. in the mouse disclosed by Ma because this would provide counterparts to computer buttons operated by depressing a switch operator.

As per claim 33, Dodson et al. teach a signal generator Fig.1 (14) corresponding to a mechanism for generating cursor control signals, the mechanism being carried by the bottom member.



As per claim 34, Dodson et al. teach a ball Fig.1 (16) corresponding to wherein the mechanism is a trackball or optical electronics.

As per claim 36, Da teaches the handheld computer mouse (a mouse including a top member which has press keys for signal input into the computer, coupling device at the bottom (abstract)) comprising:

a base member (bottom member Fig.2 (3);

a top member mechanically coupled with the base member to form the mouse housing of the handheld computer mouse and to encase said mouse electronics, the mouse housing being configured to be grasped and manipulated by a hand of a user, the base member forming the bottom surface of the housing and being configured for contact with a support surface, the top member moving relative to the base member to provide a clicking action (the top cover shell 1 has a smoothly curved profile fitting the palm of the hand, having a plurality of pivoted press keys 11 at the front side adapted for triggering a respective contact on the circuit board 2, a coupling device 12 at the bottom adapted for fastening to the intermediate shell 3 (as one embodiment of the present invention, the coupling device 12 is comprised of a plurality of downward locating posts), a downward rod 13 which has a center axle hole 14, and at least one for example two downward locating posts 15 raised from the bottom at two opposite sides relative to the downward rod 13 and adapted for securing the circuit board 2 (column 1, lines 60-67 and column 2, lines 1-4). The prior art does teach all the claimed limitations with the exception of providing the entire top member serving as a button for actuating

an internal electronic switch configured to register the clicking action as an input to the electronics of the handheld computer mouse.

However, Dodson et al. teach a platform Fig.1 (18) being an integral top member as the entire top surface.

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the platform as a top member as taught by Dodson et al. in the mouse disclosed by Ma because this would provide counterparts to computer buttons operated by depressing a switch operator.

As per claim 37, Dodson et al. teach a top surface Fig.1 (26) corresponding to wherein the top member is a single piece having no separate mechanical buttons disposed thereon.

As per claim 42, Da teaches a computer mouse having a mouse housing for containing electronics that at least generates cursor control signals (a mouse including a top member which has press keys for signal input into the computer, coupling device at the bottom (abstract)), the mouse housing comprising:

a base member configured to make moving contact with a surface (bottom member Fig.2 (3);

an integral top member mechanically coupled with the base member, the integral top member cooperating with the base member to fully encase the electronics disposed therein, the integral top member forming the top and sides surfaces of the mouse housing, the base member forming the bottom surface of the mouse housing, the integral top member and the base member being coupled (the top cover shell 1 has a

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smoothly curved profile fitting the palm of the hand, having a plurality of pivoted press keys 11 at the front side adapted for triggering a respective contact on the circuit board 2, a coupling device 12 at the bottom adapted for fastening to the intermediate shell 3 (as one embodiment of the present invention, the coupling device 12 is comprised of a plurality of downward locating posts), a downward rod 13 which has a center axle hole 14, and at least one for example two downward locating posts 15 raised from the bottom at two opposite sides relative to the downward rod 13 and adapted for securing the circuit board 2 (column 1, lines 60-67 and column 2, lines 1-4). The prior art does teach all the claimed limitations with the exception of providing the top member serving as a button for actuating an internal electronic switch configured to register the clicking action as an input to the electronics of the handheld computer mouse.

However, Dodson et al. teach a platform Fig.1 (18) being an integral top member as the entire top surface.

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the platform as a top member as taught by Dodson et al. in the mouse disclosed by Ma because this would provide counterparts to computer buttons operated by depressing a switch operator.

5. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent # 5,841,426 ("Dodson et al.") in view of US Patent # 5,633,658 ("Da") and further in view of US Patent # 5,661,505 ("Livits").

As for claim 46, the combination of Dodson et al. and Da fails to teach the mechanism is a trackball.

However, Livits teaches a trackball mechanism (column 1, lines 17).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize a trackball as taught by Livits in the modified system disclosed by the combination of Dodson et al. and Da because this would provide a rocking keyboard incorporate a trackball which can itself serve as a trackball for inputting data to a computer.

As for claim 47, Livits teaches an optical sensor Fig.2C (106a).

### **Conclusion**

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard, can be reached on (571) 272-7603.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(571) 273-8300 (for Technology Center 2600 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

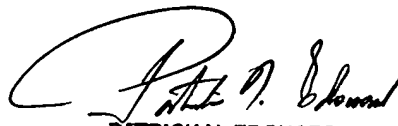
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance



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Date 12/29/2005



PATRICK N. EDOUARD  
SUPERVISORY PATENT EXAMINER